



## ABSTRACT

Disclosed is a method for forming a bottle shaped trench. The method of the present invention comprises includes steps of providing a substrate; forming a plurality of operation layers on the substrate; forming a photoresist layer on the operation layers to define a predetermined position; forming a trench according to the predetermined position; implanting predetermined ions, which reduces oxidizing rate of the sidewall of the trench, into the upper sidewall of the trench; oxidizing the sidewall of the trench to form an oxide layer, in which the portion of the oxide layer formed at the portion of the sidewall implanted with the ions is thin, while the portion of the oxide layer formed at the portion of the sidewall not implanted with the ions is thick; and removing the oxide layer to form a bottle shaped trench.